

**Supporting Statement for the  
Quantitative Impact Study  
(FR 3045; OMB No. 7100-0303)**

**Summary**

The Federal Reserve, under delegated authority from the Office of Management and Budget, proposes to conduct the voluntary Quantitative Impact Study (QIS-4) and the Loss Data Collection Exercise (LDCE) (FR 3045; OMB No. 7100-0303). The Federal Reserve, in conjunction with the Office of the Comptroller of the Currency (OCC), Federal Deposit Insurance Corporation (FDIC) and Office of Thrift Supervision (OTS), proposes to survey an estimated twenty-five large banking institutions. The QIS-4 is the latest in a series of studies to determine the effects of proposed revisions to the Basel Capital Accord (Accord). The estimated total burden for this survey is 8,000 hours.

The Basel Committee on Banking Supervision (BCBS) has developed new regulatory capital standards for internationally active banks, the “International Convergence of Capital Measurement and Capital Standards: A Revised Framework” (the Framework), to replace the current Capital Accord that has been in place since 1988. The proposed Framework would be more complex than the original Accord in order to be more risk-sensitive and to address the advances and innovations in financial instruments and risk measurement practices that have occurred during the past decade.

As members of the BCBS, the federal banking agencies<sup>1</sup> (the agencies) share the common goal of promoting a capital standard that provides adequate safety and soundness to world financial markets in a way that is far more sensitive to different levels of economic risk than the current Accord. To do this, the agencies believe they must rely heavily on an institution’s internal risk measurement systems and its own quantitative assessment of risk, particularly for the largest, most complex, and highly sophisticated banking organizations. For other institutions, less complex capital standards could suffice.

The proposed Framework contains several alternative measures for calculating minimum regulatory capital requirements, but the U.S. agencies are proposing to offer U.S. banks only the most advanced approaches for credit and operational risk. They further propose to make the new Framework *mandatory* for only a small number of large, complex banking institutions in the United States<sup>2</sup> and would allow other banking institutions that have adequate risk measurement systems and controls to “opt-in” to the new standard if they sought to do so. Those that did not would continue to operate under the current capital standard or future variations of that standard. This survey would improve the agencies’ understanding of the likely effects of the proposed standards and would help in adopting new regulatory capital standards in the United States. This fourth survey would build on earlier surveys that evaluated less-developed proposals in gathering detailed information about each participant’s risk profile and risk measurement

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<sup>1</sup> The Federal Reserve, Comptroller of the Currency, Federal Deposit Insurance Corporation, and Office of Thrift Supervision.

<sup>2</sup> Mandatory institutions would be those with total banking (and thrift) assets of \$250 billion or more or total on-balance-sheet foreign exposure of \$10 billion or more.

process.

On June 26<sup>th</sup> the agencies issued a press statement outlining the objectives and timing of the survey and inviting institutions interested in participating in the survey to express that interest to their supervisor. Consequently, the agencies estimate twenty-five large U.S. banking organizations would participate in QIS-4.

## **Background and Justification**

The current Accord was developed in 1988 in order to promote safety and soundness among banking systems worldwide and to bring about greater competitive equity among internationally active banks. Though relatively simple in approach, it reflected banking practices of the time. Since then, however, risk measurement theory and practice have advanced, and financial markets have become more efficient in measuring and pricing risk. Consequently, the BCBS believes that a more sophisticated approach to capital adequacy is warranted.

For the more complex banking organizations, one good way to make regulatory capital standards more effective and more consistent with levels of underlying economic risk is to rely more heavily on their internal risk measures and methodologies that are used for pricing, reserving, performance evaluation, and other purposes. A crucial requirement, however, is that the internal measures and methodologies be sufficiently rigorous and comprehensive. Therefore, before any institution would be allowed to use its internal measures for calculating regulatory capital requirements, its risk measurement and management process must meet specific minimum standards, and supervisors would need to evaluate and approve its practices. This approach has the further expected advantage of stimulating better risk measurement and management practices in major banking organizations throughout the world.

This survey is the fourth in a series of Quantitative Impact Studies conducted by the agencies. Only a few U.S. banks participated in the first two versions of the QIS. QIS-3, conducted in 2002, involved more than 200 banking organizations around the world, including twenty-two in the United States. The results of QIS-3 were instrumental in shaping the final version of the new Framework issued on June 26, 2004. However, before proceeding with formal rulemaking in the United States on the basis of this Framework, the agencies need to better understand its likely effects on U.S. banking organizations and banking markets. That information can be provided only by the institutions themselves. It is important, therefore, that this survey be conducted in a timely manner so as not to delay final decisions on U.S. regulatory standards and the necessary investments and operational changes that U.S. banking institutions would need to make. QIS-4 would also provide the agencies an opportunity to evaluate recent changes to earlier proposals and for participating institutions to estimate the effect of new standards using better risk measurement systems and data bases than existed when QIS-3 was conducted two years ago.

While seeking to develop and implement far more sophisticated and risk-sensitive capital standards, the agencies also need to assure themselves that the new regulatory capital requirements will be both prudent and practical relative to existing capital levels and market expectations. The information requested would provide the participating banking organizations

with a better understanding of forthcoming and complex proposals that a new Framework would entail. That understanding, in turn, should improve the quality of public comments the participants and banking system provide to the agencies on the proposed capital standards.

## **Description of Information Collection**

On a best-efforts basis, participating banking institutions would provide information about the amount of credit exposures (e.g., loans and loan commitments) for each major loan portfolio (corporate, interbank, sovereign, and retail) and the risk characteristics of each portfolio, as indicated by internal measures of a loan's probability of default (PD), loss given default (LGD), remaining maturity, and likelihood that currently undrawn lines of credit will be drawn. Exposures in each portfolio could be slotted into as many as twenty PD "bands" and a variety of maturity and LGD categories. Retail portfolios would be further divided among first residential mortgages, home equity loans and lines of credit, and other retail exposures. To the extent possible, corporate exposures would differentiate between those arising from credit extended to small and medium sized firms versus credit extended to larger businesses, because the proposal assumes that smaller companies are generally less exposed to business cycles. These and other distinctions among exposures would parallel differences embodied in proposed capital standards and attempt, to the extent practicable, to reflect distinctions important to banks in pricing and measuring risk. Participants would also be asked to provide information about their level of operational risk as well as their internal loss data in a Loss Data Collection Exercise (LDCE). Internal loss data should include the amount of each individual operational loss exceeding a threshold, the internal business line, the event type, and the amount of any recoveries.

The survey would be completed using formatted Excel spreadsheets, which would calculate each respondent's capital requirements for credit risk based on the information it provides. For submission of the LDCE data, participants would provide this information using formatted Excel spreadsheets or comma separated value (.csv) files. For the operational risk measurement, participants would complete formatted Excel spreadsheets. Participants would submit their results to their appropriate supervisors. The Attachment contains sample spreadsheets to illustrate the kind of information the U.S. agencies are developing. The agencies will continue to refine and amend the survey form over the summer.

Banks would also be asked to complete a free-form questionnaire to provide information about the internal procedures that were used in deriving the various indicators of portfolio risk (i.e., PDs, LGDs, etc.) and the operational risk exposure amount. They would also be asked to describe the robustness of internal or external data used, critical assumptions made, and substantive deviations from proposed U.S. supervisory standards for deriving such parameters. In some cases, participants may be asked follow-up questions about their information systems, data bases, operating procedures and controls if such information is needed to help the agencies assess the quality and limitations of the submitted data.

The agencies also believe that in order to fully evaluate QIS-4 submissions, they would likely need to conduct on-site follow-up reviews at some institutions. This effort would focus on the largest (mandatory) institutions as well as others that have demonstrated they have provided

high quality data, i.e., that their submissions are based on credible estimates. The goal of these on-site reviews would be to focus on areas requiring additional investigation and follow-up, and to conduct benchmarking of reference data, data collection, and quantification methodologies. These visitations would not represent any type of pre-qualification review, but rather are intended to improve the agencies' understanding of the issues faced by banks in completing QIS-4 and any outlier results.

QIS-4 would focus on only one of the three alternative proposals proposed by the BCBS and evaluated internationally in 2002 through QIS-3. Consequently, it should be somewhat less burdensome than the earlier survey. In order to help participants understand the nature of the information requested in the survey and to provide high quality data, agency supervisory staff also plan to conduct a QIS workshop and to host periodic conference calls for participating institutions.

### **Time Schedule for Information Collection and Publication**

The agencies expect to distribute spreadsheets to participating institutions in October 2004 and to request that institutions complete and return them by year-end. The agencies would then review, summarize, compare results, and resolve questions before publishing a Notice of Proposed Rulemaking in the *Federal Register* around mid-year 2005.

### **Legal Status**

The Board's Legal Division has determined that QIS-4 is authorized by law (12 U.S.C. § 1844) and is voluntary. Individual responses are exempt from disclosure pursuant to the Freedom of Information Act (5 U.S.C. § 552(b)(4)).

### **Consultation Outside the Agency**

Supervisory and senior staff from the Federal Reserve are coordinating this project with the other U.S. banking and thrift regulatory agencies and are also discussing their approach to this survey with foreign country members of the BCBS. Throughout the process of developing and finalizing the survey spreadsheets, questionnaires, and related instructions, staff members would also consult with industry representatives.

### **Estimate of Respondent Burden**

Total reporting burden is estimated to be 8,000 hours as shown in the following table. As this is a voluntary survey, it is not possible to predict the exact number of banking institutions that would participate. Nevertheless, the agencies expect about twenty-five banking institutions to participate, representing both institutions for which the Framework would be mandatory and also "opt-in" institutions. Based on information from the previous Quantitative Impact Studies, the Federal Reserve estimates that each respondent would need a team of employees working

collectively thirty-five labor days per banking institution to complete the survey, with the time required varying materially among participants, depending on the structure and adequacy of each institution's information systems. The Federal Reserve estimates a further five labor days per banking institution to complete the LDCE. This estimate includes time for meetings, conferences calls, and workshops with the respondents to ensure high quality data, but excludes time that the institutions would otherwise devote to understanding the proposed rule and evaluating and enhancing their procedures for measuring risk. The estimated average hours per response should be less than QIS-3 since some banking institutions already have systems in place for providing the information requested on the spreadsheets and the proposed survey has been reduced in scope. Although the survey would require significant resources on the part of participating companies and the regulatory agencies, such information is highly relevant to the on-going supervision and risk management activities of the banking organizations. The burden associated with the QIS-4 represents less than 1 percent of total Federal Reserve System annual reporting burden.

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	<i>Estimated number of respondents</i>	<i>Annual frequency</i>	<i>Estimated average hours per response</i>	<i>Estimated annual burden hours</i>
FR 3045				
QIS-4	25	1	280	7,000
Loss Data Collection Exercise	25	1	40	<u>1,000</u>
<i>Total</i>				8,000

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Based on an average hourly cost of \$50 for senior bank officers and support staff, the annual cost to the public is estimated to be \$400,000.

### **Estimate of Cost to the Federal Reserve System**

The estimated cost to the Federal Reserve System for collecting and processing the survey is estimated at \$60,000, excluding resources that would otherwise be devoted to related efforts of understanding and finalizing new capital rules or evaluating risk management practices of banks.